

Division 4315, Storm Drain Projects
Fund 525, Storm Drainage Enterprise

Division:
Department:
Project:

Storm Drain Projects
Public Works
6001 -- Storm Drainage Rehabilitation Program

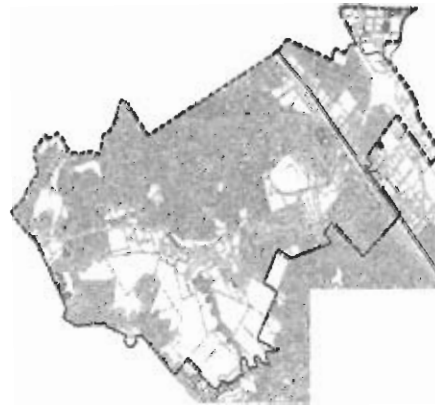
Project Narrative:

Storm Drain Rehabilitation - Annual Program

This project is intended to fund improvements to the City's storm drainage infrastructure that are identified during the fiscal year. During the winter season, it often becomes apparent that drainage systems previously in adequate condition have failed and require repair and/or replacement. In addition, this project may fund previously unidentified but necessary storm drain improvement identified in conjunction with other improvement projects such as for streets or sanitary sewer.

Drainage improvement projects typically include:

1. ☐ repair or replacement of corroded corrugated metal pipes (CMPs);
2. ☐ realignment or replacement of reinforced concrete pipes (RCPs);
3. ☐ installation of short segments of storm pipe (missing links) to connect gaps in the drainage system;
4. ☐ installation of new or repair of existing catch basins;
5. ☐ installation of new or repair of existing gutter or to control surface runoff;
6. ☐ installation of new or repair of existing subdrains to remove surface and shallow flows; and
7. ☐ installation of new or repair of existing creek outfalls.



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ 38,029	\$ 315,000	\$ 72,500	\$ 75,500	\$ 75,500	\$ 75,500	\$ 75,500	\$ 727,529
Funding Sources			\$ 38,029	\$ 315,000	\$ 72,500	\$ 75,500	\$ 75,500	\$ 75,500	\$ 75,500	\$ 727,529

EXPENDITURES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9030	9030	Improvements Other Than Building	\$ 38,029	\$ 315,000	\$ 72,500	\$ 75,500	\$ 75,500	\$ 75,500	\$ 75,500	\$ 727,529
TOTAL EXPENDITURES			\$ 38,029	\$ 315,000	\$ 72,500	\$ 75,500	\$ 75,500	\$ 75,500	\$ 75,500	\$ 727,529

Division 4315, Storm Drain Projects
Fund 525, Storm Drainage Enterprise

Division:
Department:
Project:

Storm Drain Projects
Public Works
6010 -- Water Dog Lake Siltation Removal

Project Narrative:

Water Dog Lake Siltation Removal

The dam and reservoir at water Dog Lake is our central storm water detention facility, necessary for flood control. Based on a comprehensive flooding study, the dam was raised in 1968 to provide needed storage volume. The reservoir has silted in since then. This project includes testing sediments; updating hydrological study to verify urgency; required environmental studies; permits from Dam Safety, Fish & Game, Regional Water Quality Control Board, etc.; process design; dredging, disposing of material; and inspection construction.



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ -	\$ 25,000	\$ 200,000	\$ 340,000	\$ -	\$ -	\$ -	\$ 565,000
Funding Sources			\$ -	\$ 25,000	\$ 200,000	\$ 340,000	\$ -	\$ -	\$ -	\$ 565,000

EXPENDITURES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9030	8331	Engineering/Architectural	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000
9030	8351	Other Professional/Technical	\$ -	\$ -	\$ 200,000	\$ 340,000	\$ -	\$ -	\$ -	\$ 540,000
TOTAL EXPENDITURES			\$ -	\$ 25,000	\$ 200,000	\$ 340,000	\$ -	\$ -	\$ -	\$ 565,000

Division 4315, Storm Drain Projects
Fund 525, Storm Drainage Enterprise

Division:
Department:
Project:

Storm Drain Projects
Public Works
6018 -- Corp Yard Bins, Cover Wash Ra

Project Narrative:

Corporation Yard Bin Covers

The covers for the material bins at the Corporation Yard will help reduce the amount of soil and debris runoff from entering the storm drainage system and will help the City comply with the Stormwater Pollution Prevention Program.



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000
Funding Sources			\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000

EXPENDITURES

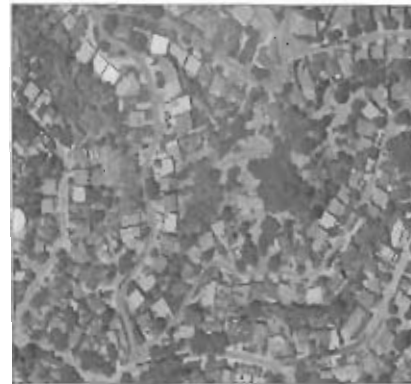
Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9030	9030	Improvements Other Than Building	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000
TOTAL EXPENDITURES			\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000

Division 4315, Storm Drain Projects	Division:	Storm Drain Projects
Fund 525, Storm Drainage Enterprise	Department:	Public Works
	Project:	6028 -- Storm Drain Sys-Hillman North

Project Narrative:

Hillman Avenue Storm Drain Project

This project will construct about 2,500 feet of HDPE storm drain pipe, 2100 feet of perforated underdrain, catch basins and manholes along Hillman Avenue between Notre Dame and North Road. This street segment currently has only gutter drainage which is insufficient for the volume of surface runoff.



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000
Funding Sources			\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000

EXPENDITURES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9030	9030	Engineering/Architectural	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ 30,000
9030	9030	Improvements Other Than Building	\$ -	\$ -	\$ 470,000	\$ -	\$ -	\$ -	\$ -	\$ 470,000
TOTAL EXPENDITURES			\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000

Division 4315, Storm Drain Projects
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Project:

Storm Drain Projects
Public Works
6042 -- 1143-1145 Alameda Storm Drainage

Project Narrative:

1133-1145 Alameda de las Pulgas

The headwall of the pipe under Alameda de las Pulgas was constructed in 1956. The pipe conveys runoff across Alameda de las Pulgas from the Library site into an open channel. This channel runs in a City easement through the apartment buildings at 1133-1145 Alameda de las Pulgas to another culvert under the apartment building parking lot, which in turn flow to the creek. The open channel in the City easement has eroded its banks, widening the channel such that the top of bank is now at the face of the apartment buildings. Retaining walls in the channel are in need of repair. The project will repair the headwall, returning the headwall and the Alameda de las Pulgas sidewalk to their original use, and will stabilize the bank through bioengineered plantings.



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ 3,938	\$ 48,000	\$ 220,000	\$ -	\$ -	\$ -	\$ -	\$ 271,938
Funding Sources			\$ 3,938	\$ 48,000	\$ 220,000	\$ -	\$ -	\$ -	\$ -	\$ 271,938

EXPENDITURES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9030	8331	Engineering/Architectural	\$ 3,438	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ 23,438
9030	8351	Other Professional/Technical	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000
9030	9030	Improvements Other Than Building	\$ 500	\$ 48,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 48,500
TOTAL EXPENDITURES			\$ 3,938	\$ 48,000	\$ 220,000	\$ -	\$ -	\$ -	\$ -	\$ 271,938

Division 4315, Storm Drain Projects	Division:	Storm Drain Projects
Fund 525, Storm Drainage Enterprise	Department:	Public Works
	Project:	6045 -- Other Storm Drain Capital Improvement

Project Narrative:

Other Storm Drain Capital Improvements

Citywide studies will be conducted of the condition and capacity of the storm drain system as a part of storm drain master plan. The studies will determine the existing pipes and structures, which are in need of upgrade, rehabilitation or replacement. The studies will also identify the locations of drainage system interconnects that are needed to complete the drainage system. As these projects are defined they will be assigned their own budget account.



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ -	\$ -	\$ -	\$ 500,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 2,600,000
Funding Sources			\$ -	\$ -	\$ -	\$ 500,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 2,600,000

EXPENDITURES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9030	9030	Improvements Other Than Building	\$ -	\$ -	\$ -	\$ 500,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 2,600,000
TOTAL EXPENDITURES			\$ -	\$ -	\$ -	\$ 500,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 2,600,000

Division 4315, Storm Drain Projects
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Project:

Storm Drain Projects
Public Works
6046 -- Twin Pines Creek Bank Erosion

Project Narrative:

Twin Pines -- Creek Bank Stabilization

Belmont Creek in Twin Pines Park is being damaged by bank erosion and scouring of the bed during high-flows. This damage was exasperated by the El Nino flooding of 1998. Further erosion threatens the pedestrian bridge to the group picnic area and the large trees lining the banks. This project is intended to stabilize the creek banks through a process known as bioengineering. The first step is assessment to characterize the high-flow dynamics, followed by design and installation of structural matrices incorporating live plantings to permanently protect the banks from the erosive forces of water. Staff will seek grant funding or attempt to identify grants for construction.



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ -	\$ 20,000	\$ 50,000	\$ 250,000	\$ -	\$ -	\$ -	\$ 320,000
Funding Sources			\$ -	\$ 20,000	\$ 50,000	\$ 250,000	\$ -	\$ -	\$ -	\$ 320,000

EXPENDITURES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9020	8331	Engineering/Architectural	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000
9030	9030	Improvements Other Than Building	\$ -	\$ 20,000	\$ 50,000	\$ 225,000	\$ -	\$ -	\$ -	\$ 295,000
TOTAL EXPENDITURES			\$ -	\$ 20,000	\$ 50,000	\$ 250,000	\$ -	\$ -	\$ -	\$ 320,000

Division 4315, Storm Drain Projects
Fund 525, Storm Drainage Enterprise

Division:
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Project:

Storm Drain Projects
Public Works
6048 -- Other Siltation Removal Projects

Project Narrative:

Other -- Siltation Removal Projects

This project is for the design and installation of stormdrain controls to remove silt and sediment from Belmont's stormwater runoff. The RWQCB revised the City's NPDES stormwater discharge permit in Winter 2003 and also intends to add most San Mateo County streams including Belmont Creek to EPA's 303d list for water quality impairment due to high sediment loads. Over the next 3 to 5 years, the revised permit will phase in many new requirements intended to protect the water quality of the creeks and SF Bay. Though the degree of sediment control to be implemented is not yet known, it is anticipated that RWQCB may require cities with creeks impaired by sediment to install mechanical filters or construct retention (settling) basins.



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 200,000
Funding Sources			\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 200,000

EXPENDITURES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9030	8331	Engineering/Architectural	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 200,000
TOTAL EXPENDITURES			\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 200,000

Division 4315, Storm Drain Projects
Fund 525, Storm Drainage Enterprise

Division:
Department:
Project:

Storm Drain Projects
Public Works
6049 -- System Analysis/Master Plan Update

Project Narrative:

Stormdrain Master Plan Update

The purpose up of stormdrain master plan is to collect and analyze data about the about capacity and performance of the stormdrain system, identify problem locations, and make recommendations to improve the system. The last update to Belmont's Stormdrain Master Plan was completed in 1980 and there has now been sufficient expansion and modification of the system to warrant new analysis and recommendations. The Public Works Department anticipates contracting with a qualified and experienced engineering firm for this work. It is tentatively scheduled over several years to allow time for analysis of the existing system, design of wet season data collection, and analysis of results with recommended improvements



FUNDING SOURCES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
5120	5120	Fund Balance	\$ -	\$ 50,000	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 115,000
Funding Sources			\$ -	\$ 50,000	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 115,000

EXPENDITURES

Account		Description	Actual	Estimated	Proposed	Planned	Planned	Planned	Planned	Total
Acct	SubAcct		Prior Actual	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	
9030	8331	Engineering/Architectural	\$ -	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 15,000
9030	8351	Other Professional/Technical	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
TOTAL EXPENDITURES			\$ -	\$ 50,000	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 115,000